Quality Criteria

A. Soil - Soil Erosion/Condition/Deposition

RESOURCE CONCERN	DEFINITION	QUALITY CRITERIA	ASSESSMENT TOOL
1. Soil Erosion			
a. Sheet & Rill	Removal of uniform layer of soil from the land surface caused by rainfall and surface water runoff.	Average annual sheet and rill erosion does not exceed the soil loss tolerance (T) for the soil map unit listed in Section II, FOTG.	Current erosion prediction tool i.e. Revised Universal Soil Loss Equation (RUSLE); Universal Soil Loss Equation (USLE)
b. Ephemeral Gully	Concentrated flow channels less than one foot in depth that can be eliminated by tillage operations	Areas are stabilized	Volume calculations, observation
c. Classic Gully	Gully that may enlarge annually by headcutting, lateral widening and deepening. Too deep to cross with normal farming operations.	Affected areas are stabilized. Head cutting is stopped, channel bottom and side slopes are stabilized.	Volume calculation; historical monitoring; client records; observation
d. Stream Bank	Sloughing of banks caused by stream flow, overbank flow, unstable soils, obstructions, unstable channel bottom, livestock trampling, inadequate riparian zone, or a combination of these.	Streambank is stabilized between two stable points at the design event.	Volume calculation; historical monitoring; client records; observation
e. Mass Movement	Soil slippage, landslides, or slope failure, normally on hillsides, in deep cuts or through unstable soil on sloping land that creates a large volume of soil movement.	The potential or result of mass movement does not create hazardous conditions, cause damage, limit land use, or affect other natural resources.	Observation
f. Irrigation Induced Erosion	Soil erosion caused by excessive amounts and/or velocities of induced water.	Soil loss tolerance (T) for the soil map unit listed in Section II, FOTG is not exceeded.	Current erosion prediction tool i.e. RUSLE/USLE
g. Roadbanks, Construction Sites	The roadbank or construction site is causing erosion problems and/or damage on site and/or off site.	Erosion hazards are addressed within the site and do not contribute sediment off-site.	RUSLE; Observation
h. Scour Erosion	Channels caused by out of bank flow of streams or drainage channels.	Affected areas are stabilized considering flow velocity, depth, and probability of occurrence.	Volume Calculation
2. Condition			
a. Poor Tilth	Lack of suitable combinations of mineral, air, water, and organic matter that impair plant growth and vigor.	Planned practices improve the physical soil conditions and reduce an identified tilth problem.	Visual observation, Soil Quality Testing Kit
b. Compaction	Excess compressing of soil particles and aggregates by machinery and livestock, thereby affecting the plant-soil-moisture-air relationship.	Planned measures minimize or eliminate management induced compacted zones that limit plant root growth and/or water movement.	Soil Conditioning Index
c. Excess fertilizers, animal waste and other organics	Excess fertilizers, animal waste and other organics that restrict the desired use of the land.	Soil does not contain or transmit contaminants that adversely affect water, air, plants and animals.	Soil tests
3. Deposition			
a. Damage	Soil deposition adversely affects properties related to plant growth or intended land use and channel capacity.	Deposition does not alter the plant-soil relationship, damage property, or cause physical damage to vegetation, limit flood conveyance or limit the intended land use.	Observation
b. Safety	Deposition on roads, in culverts or at other locations causing unsafe conditions, flooding or loss of access.	Deposition does not create a safety hazard.	Observation